

REMARKS

The Examiner's action of June 20, 2006 is noted in which the pending claims, Claims 1-4, 6-11 and 13-28 are rejected, but in which Claims 13 and 17-19 are indicated as being allowable if re-written in independent form. This has been done and Claims 29 through 32 are presented herewith. Allowance of these claims is therefore requested.

With respect to the rejection of the claims under 35 USC 102 as being unpatentable over the Sobey et al. reference, Applicant has amended the claims to indicate that the tunable optical parametric oscillator is provided with a laser-pumped optical parametric oscillator having a stable resonator that is pumped with seeded pumping energy, injection seeding.

In contrast, Sobey et al. use an unstable resonator. Moreover, it is not injection seeded. The claimed invention claims a stable resonator that is injection seeded.

More specifically, in the Sobey et al. patent there is a tunable OPO pumped with narrow line width energy. Sobey et al. achieves this narrow line width energy by pumping their pumping OPO with an unseeded narrow line-width laser and by using a diffraction grating or special mirror control. The result is a narrow line width output to "seed" the tunable power OPO (see seed 11 in Figure 1).

On the other hand, the claimed system uses a laser-pumped OPO that in turn pumps a tunable OPO. The laser that pumps the laser-pumped OPO is not line narrowed, nor does it need to be. However, the laser-pumped OPO has a narrowed line width provided either by non-collinear phase matching or by seeding the laser-pumped OPO with an HeNe laser or other infrared laser source in which the seed is injected into the output of the laser that pumps the laser-pumped OPO.

In short, nowhere is shown or taught in the Sobey et al. reference a laser-pumped OPO that utilizes a stable resonator.

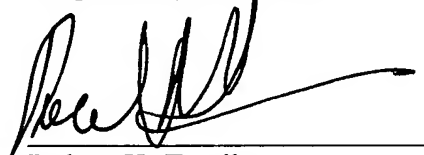
Secondly, in Sobey et al., the output of the pumping laser for the master OPO is not seeded. Therefore there is no injection seeding. Thus the output of the laser used to pump the master oscillator is unseeded.

Thirdly, nowhere in Sobey et al. is shown non-colinear phase matching for the laser-pumped OPO that provides the narrowed line width for the tunable OPO.

Thus the Sobey et al. reference does not anticipate the claims.

In view of the above Amendment, allowance of the claims and issuance of the case are therefore earnestly solicited.

Respectfully submitted,



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